

RAW SEQUENCE LISTING ERROR REPORT

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Application Serial Number:	09/7.86.635B
Source:	15W16
Date Processed by STIC:	9/20/04

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Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/cfs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box-1450, Alexandria, VA 22313-1450
- U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Revised 05/17/04



IFW16

RAW SEQUENCE LISTING DATE: 09/20/2004
PATENT APPLICATION: US/09/786,635B TIME: 16:18:10

Input Set: A:\LEA33298 - seq list 8-2004.txt
Output Set: N:\CRF4\09202004\I786635B.raw

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5 <120> TITLE OF INVENTION: ATP binding cassette genes and proteins for diagnosis
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            diseases
    9 <130> FILE REFERENCE: ATP binding cassette genes and protein
--> 11 <140> CURRENT APPLICATION NUMBER: US/09/786,635B
   12 <141> CURRENT FILING DATE: 2001-05-22
   14 <150> PRIOR APPLICATION NUMBER: 101706
   15 <151> PRIOR FILING DATE: 1998-09-25
   17 <160> NUMBER OF SEQ ID NOS: 54
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   21 <210> SEQ ID NO: 1
   22 <211> LENGTH: 6880
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   23 <212> TYPE: DNA
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   27 <223> OTHER INFORMATION: cDNA of ABCA1 (ABC1)
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3 <110> APPLICANT: Bayer AG

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148 <212> TYPE: PRT
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151 <220> FEATURE:
152 <223> OTHER INFORMATION: Peptide sequence of ABCAl (ABC1)
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155 Met Pro Ser Ala Gly Thr Leu Pro Trp Val Gln Gly Ile Ile Cys Asn
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DATE: 09/20/2004 TIME: 16:18:10

PATENT APPLICATION: US/09/786,635B TIME

Input Set : A:\LEA33298 - seq list 8-2004.txt
Output Set: N:\CRF4\09202004\I786635B.raw

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164	Alá	Arg	Arq	Leu	Leu	Leu	Tyr	Ser	Gln	Lys	Asp	Thr	Ser	Met	Lys	Asp
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177	ыса	AL 9	115	1100	Vul		200	120	-1-	,,,,	• •••		125	0-1	- 1 -	V
	T.011	His		Thr	car	T.e.11	Cvs		Glv	Ser	Lvc	Ser		Glu	Met	Tle
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		Lieu	GIA	Asp	GIII	150	vaı	act	Giu	neu	155	GTÅ	нец	FIO	Arg	160
	145	T 011	λ I α	*1-	ת ד ת		7.~~	17-1	T 011	7. ~~~		7 an	Mot	N an	τ1.	
	гуя	Leu	AId	Ara		GIU	Arg	Val	Leu	-	261	MSII	Met	мер		пеп
186	.		т1 "	T	165	mla sa	T	71	C	170	C	Dage	Dha	Dro	175	Tira
	ьys	Pro	tre		Arg	Inr	Leu	ASII		Int	sei	Pro	rne		ser	⊔у≲
189	~ 3	+	7.7	180	7 J -	mla	*	m\	185	T	TT	C	T	190		T 011
	GIU	Leu		GIU	Ala	THE	ьув		ьец	Leu	nis	ser	_	GIY	THE	neu
192	- 7 -	~1	195	.	ml			200	.	m	a		205	3	a1	a1
	Ala	Gln	GIU	Leu	Phe	Ser		Arg	ser	Trp	ser		Met	Arg	GIn	GIU
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225		370					375					380				
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266	Ala	Val	Ile	Ile	Lys	Gly	Ile	Val	Tyr	Glu	Lys	Glu	Ala	Arg	Leu	Lys
267			595					600					605			
269	Glu	Thr	Met	Arg	Ile	Met	Gly	Leu	Asp	Asn	Ser	Ile	Leu	Trp	Phe	Ser
270		610	_				615				_	620	_			
		Phe	Ile	Ser	Ser		Ile	Pro	Leu	Leu	Val	Ser	Ala	Gly	Leu	
	625		~ 7		_	630	~7	_	_	_	635		_	_	n .	640
	vai	Vai	TTE	Leu	-	ьeu	GIĀ	Asn	rien		Pro	туг	ser	Asp		ser
276	17-1	17a l	Dho	17a l	645	Tan	Cor	17-1	Dho	650	٧al	v-1	Thr	Tla	655 Leu	Gln.
279	val	vai	PHE	660	FIIG	Leu	ser	vai	665	MIG	val	vai	TILL	670	цец	GIII
	Cvs	Phe	Leu		Ser	Thr	Leu	Phe		Ara	Ala	Asn	Leu		Ala	Ala
282	O, D		675		001			680					685			
	Cys	Gly		Ile	Ile	Tyr	Phe		Leu	Tyr	Leu	Pro	Tyr	Val	Leu	Cys
285	_	690	_		•	•	695			•		700	•			-
287	Val	Ala	Trp	Gln	Asp	Tyr	Val	Gly	Phe	Thr	Leu	Lys	Ile	Phe	Ala	Ser
288	705					710					715					720
290	Leu	Leu	Ser	Pro	Val	Ala	Phe	Gly	Phe	Gly	Cys	Glu	Tyr	Phe	Ala	Leu
291					725					730					735	
	Phe	Glu	Glu		Gly	Ile	Gly	Val		Trp	Asp	Asn	Leu		Glu	Ser
294		_	_	740		_			745				_	750		
	Pro	Val		Glu	Asp	Gly	Phe		Leu	Thr	Thr	Ser	•	Ser	Met	Met
297	T	nk -	755	mb	nh -	T	m	760	*** 7	Mak	m\	Mara-a	765	71.	01	» l -
	ьeп		Asp	Tnr	Pne	Leu	_	GTÀ	val	met	Thr	_	Tyr	тте	GIU	Ата
300	17-1	770	Dro	C1	C1	T1	775	Tl^	Dres	7 ~~	Dra	780	TT's ***	Dha	Dec	Crea
202	AGT	Fue	PLO	GTA	GTII	TAI	GT Å	TIG	PLO	arg	Pro	$\operatorname{tr}\mathbf{p}$	TAT	rne	LLO	сys

```
<210> 3
<211> 1130
<212> DNA
<213> Human
                                                                        See p. 7

for every

Aplanation

(n's need

Aplanation

in (2207-2237)

section)
<220>
<223> human cDNA of ABCB9
<400> 3
gccaat nca cggtttcatc atggaactcc aggacggcta cagcacagag acaggggaga 60
agggcgccca gctgtcaggt ggccagaagc agcgggtggc catggccdng gctctggtgc 120
ggaaccccc agtcctcatc ctggatgaag ccaccagege tttggatgcc gagagegagt 180-
atotgatoca goaggocato catggoaaco tgtoagaago acacggtact catcatogog 240
caccggctga gcaccgtgga gcacgcgcac etcattgtgg tgctggacaa gggccgcgta 300
gtgcagcagg gcacccacca gcagcttgct tgccccaggg cgggctttta cggcaagcth 360
gttgcagcgg cagatgtggg gtttcaaggc cgcagacttc acagctggcc acaacgagcc 420
tgtagccaac gggtcacaag gcctgatggg gggcccctcc ttcgcccggt ggcagaggac 480
ceggtgeetg eetggeagat gtgeecaegg aggttteeag etgeectaee gageecagge 540
ctgcagcact gaaagacgac ctgccatgtc ccatgatcac cgcttntgca atcttgcccc 600
tggtccctgc cccattccca gggcactctt acccdnnhct gggggatgtc caagagcata 660
gteeteteec catacecete cagagaaggg getteetgt eeggagggag acaeggggaa 720
cgggattttc cgtctctccc tcttgccagc tctgtgagtc tggccagggc gggtagggag 780
egtggaggge atetgtetge caattgeeeg etgecaatet aageeagtet eactgtgaee 840
acacgaaacc tcaactgggg gagtgaggag ctggccaggt ctggaggggc ctcaggtgcc 900
cccagecegg cacccagett tegececteg teaatcaace cetggetgge agecgeeete 960
eccacaceeg eccetgtget etgetgtetg gaggecaegt ggaeetteat gagatgeatt 1020
ctcttctgtc tttggtggat gggatggtgc aaagcccagg atctggcttt gccagaggtt 1080
                                                                     1130
gcaacatgtt gagagaaccc ggtcaataaa gtgtactacc tcttacccct
```

The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

9

VARIABLE LOCATION SUMMARY

PATENT APPLICATION: US/09/786,635B

DATE: 09/20/2004 TIME: 16:18:11

Input Set : A:\LEA33298 - seq list 8-2004.txt
Output Set: N:\CRF4\09202004\1786635B.raw

error eplanation

Use of n's or Xaa's (NEW RULES):

Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
in <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:3; N Pos. 8,109,360,586,636,637,638,1040

Seg#:4; N Pos. 944,950,957,970,1001,1002,1003,1007

Seq#:13; N Pos. 4208,4210,4211,4212,4227,4228,4229,4231,4253,4677,4691,4707

Seg#:13; N Pos. 4721,4752,4754,4772,4773

Seq#:20; N Pos. 5,2909

Seq#:25; N Pos. 1963

Seq#:31; N Pos. 856,1009,1128,1314,1326,1328,1343,1345,1346,1378,1415,2477

Seg#:31; N Pos. 2540

Seq#:54; N Pos. 856,1009,1128,1314,1326,1328,1343,1345,1346,1378,1415,2477

Seg#:54; N Pos. 2540

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/786,635B

DATE: 09/20/2004 TIME: 16:18:11

Input Set : A:\LEA33298 - seq list 8-2004.txt
Output Set: N:\CRF4\09202004\I786635B.raw

L:11 M:270 C: Current Application Number differs, Replaced Application Number L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:579 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:3 L:579 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:3 L:579 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0 M:341 Repeated in SeqNo=3 L:623 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:4 L:623 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:4 L:623 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:900 M:341 Repeated in SeqNo=4 L:1205 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:13 L:1205 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:13 L:1205 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:4200 M:341 Repeated in SeqNo=13 L:1577 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:20 L:1577 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:20 L:1577 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0 M:341 Repeated in SeqNo=20 L:1720 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:25 L:1720 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:25 L:1720 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:1920 L:1986 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:31 L:1986 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:31 L:1986 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:840 M:341 Repeated in SeqNo=31 L:2289 M:258 W: Mandatory Feature missing, <221> Tag not found for SEQ ID#:54 L:2289 M:258 W: Mandatory Feature missing, <222> Tag not found for SEQ ID#:54 L:2289 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54 after pos.:840 M:341 Repeated in SeqNo=54